ABSTRACT

A method for controlling a system includes determining the lag in data from a variable signal. The data is arranged in matrices with one column for each variable signal. The columns are shifted to produce a plurality of different shifted matrices, each shifted matrix having a given value for the lag in data for each variable signal. A variable signal estimator processes each shifted matrix to output a variable signal function defining each variable signal in terms of its mathematical dependencies on all of the variable signals. A criterial function processes each variable signal function to provide an optimal lag value for each variable signal. A point calculation algorithm processes each shifted matrix to produce a point for each column. A lag estimator processes each point and optimal lag value to output a lag function defining each lag in terms of its mathematical dependency on all of the variable signals.